

D.T.E. 04-11

Joint Petition of Boston Edison Company, Cambridge Electric Light Company, and Commonwealth Electric Light Company d/b/a NSTAR Electric pursuant to G.L. c. 25, § 19, G.L. c. 25A, § 11G, and G.L. c. 164, § 17A, for approval by the Department of Telecommunications and Energy of an Energy Efficiency Plan for 2004 including a proposal for financial assistance to municipal and small commercial energy efficiency projects.

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FOR: NSTAR ELECTRIC COMPANY  
Petitioner

## I. INTRODUCTION

On February 17, 2004, NSTAR Electric Company (“NSTAR Electric” or “Company”) filed with the Department of Telecommunications and Energy (“Department”) its Energy Efficiency Plan for 2004 (“2004 Plan”).<sup>1</sup> The 2004 Plan included a proposal for financial assistance to municipal and small commercial energy-efficiency projects. The 2004 Plan was filed pursuant to G.L. c. 25, § 19; G.L. c. 25A, § 11G; G.L. c. 164, § 17A; and Order Promulgating Final Guidelines to Evaluate and Approve Energy Efficiency Programs, D.T.E. 98-100 (2000) (“DTE Guidelines”). The Department docketed this filing as D.T.E. 04-11.

On April 6, 2004, NSTAR Electric filed revisions to the 2004 Plan to be considered in its request for approval of the 2004 Plan. On April 7, 2004, pursuant to G.L. c. 25A, § 11G, 225 C.M.R. §§ 11.00 et seq., and the DTE Guidelines at § 6.2, the Commonwealth of Massachusetts, Division of Energy Resources (“DOER”), filed a report on the 2004 Plan with the Department (“DOER Report”).<sup>2</sup> The DOER Report concluded that the 2004 Plan is consistent with the statewide energy efficiency goals required by G.L. c. 25A, § 11G, and with DOER’s Guidelines for energy efficiency programs (DOER Report at 3). See Guidelines Supporting the Massachusetts Division of Energy Resources Energy Efficiency Oversight and

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<sup>1</sup> NSTAR Electric stated that the 2004 Plan is jointly submitted by NSTAR Electric, The Energy Consortium, Associated Industries of Massachusetts, Inc., Massachusetts Climate Action Network, and the Low-Income Energy Affordability Network (February 17, 2004 NSTAR Electric letter to the Department).

<sup>2</sup> The Department commences review of energy efficiency plans after DOER files its report with the Department. G.L. c. 25A, § 11G; 225 C.M.R. §§ 11.00 et seq.

Coordination Regulation, 225 C.M.R. §§ 11.00 et seq. On April 26, 2004, the Department issued a notice of filing and request for comments. No comments were submitted. On June 16, 2004, pursuant to G.L. c. 164, § 17A, the Department conducted an evidentiary hearing on the municipal financing proposal. The record consists of three exhibits.

## II. STANDARDS OF REVIEW

### A. Energy Efficiency Programs

The Department is required to ensure that energy efficiency activities are delivered in a cost-effective manner utilizing competitive procurement processes to the fullest extent practicable. G.L. c. 25, § 19; G.L. c. 25A, § 11G. The Department has established guidelines that, among other things, set forth the manner in which the Department reviews ratepayer-funded energy efficiency plans in coordination with DOER, pursuant to G.L. c. 25, § 19 and G.L. c. 25A, § 11G. See D.T.E. 98-100.

DOER has the authority to oversee and coordinate ratepayer-funded energy efficiency programs, consistent with specified goals, and is required to file annual reports with the Department regarding proposed funding levels for said programs. G.L. c. 25A, § 11G; 225 C.M.R. §§ 11.00 et seq. If the DOER report concludes that ratepayer-funded energy efficiency programs are consistent with state energy efficiency goals, and if no objection to the DOER report is raised, the Department's review of the 2004 Plan is limited to cost-effectiveness issues and the use of competitive processes. DTE Guidelines at § 6.2; 225 C.M.R. §§ 11.00 et seq.

B. G.L. c. 164, § 17A, Financing

Pursuant to G.L. c. 164, § 17A, a gas or electric company must obtain written Department approval in order to “loan its funds to, guarantee or endorse the indebtedness of, or invest its funds in the stock, bonds, certificates of participation or other securities of, any corporation, association or trust . . . .” The Department has indicated that such proposals must be “consistent with the public interest,” that is, a Section 17A proposal will be approved if the public interest is at least as well served by approval of the proposal as by its denial.

Bay State Gas Company, D.P.U. 91-165, at 7 (1992); see Boston Edison Company, D.P.U. 850 (1983).

The Department has stated that it will interpret the facts of each Section 17A case on its own merits to make a determination that the proposal is consistent with the public interest. D.P.U. 91-165, at 7. The Department will base its determination on the totality of what can be achieved rather than a determination of any single gain that could be derived from the proposed transactions. Id.; see D.P.U. 850, at 7. The Department also found that the consistency standard best accommodates the Department's interest in protecting the utility's ratepayers from the adverse effects of unwarranted Section 17A transactions and a utility's interest in having flexibility in a changing marketplace to meet long term objectives of its ratepayers and shareholders. D.P.U. 91-165, at 7; Boston Edison Company, D.P.U. 97-17, at 6 (1997).

Thus, the Department's analysis must consider the overall anticipated effect on ratepayers of the potential harms and benefits of the proposal. D.P.U. 91-165, at 8. The

effect on ratepayers may include consideration of a number of factors, including, but not limited to: the nature and complexity of the proposal; the relationship of the parties involved in the underlying transaction; the use of funds associated with the proposal; the risks and uncertainties associated with the proposal; the extent of regulatory oversight on the parties involved in the underlying transaction; and the existence of safeguards to ensure the financial stability of the utility. Id.

### III. THE COMPANY'S 2004 ENERGY EFFICIENCY PLAN

#### A. Cost-effectiveness

Pursuant to the DTE Guidelines: (1) an energy efficiency program shall be deemed cost-effective if its benefits are equal to or greater than its costs, as expressed in present value terms and (2) before implementation, each Program Administrator shall file with the Department sufficient information, including assumptions, to support the determination of cost-effectiveness for all proposed energy efficiency programs. DTE Guidelines at §§ 3.5, 4.2.1.<sup>3</sup>

To measure a program's pre-implementation benefits in comparison to its pre-implementation costs, NSTAR Electric calculated a benefit/cost ("B/C") ratio for each of its proposed 2004 energy efficiency programs (2004 Plan, App. A at A-1). NSTAR Electric reported pre-implementation B/C ratios ranging from 1.77 to 4.41 (id.). NSTAR Electric also

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<sup>3</sup> Each energy efficiency program is also subject to a post-implementation evaluation, addressing post-implementation estimates of energy savings, capacity savings, and other savings as well as post-implementation costs. Shareholder incentives are also determined as a result of the post-implementation evaluation. See D.T.E. Guidelines §§ 4.1, 4.2.2, 5.3.

provided detailed cost and benefit information in support of each B/C ratio (id. at II-4 to II-6; App. A at A-2). Costs for each program were categorized in terms of administration, implementation, customer cost, evaluation, and shareholder performance incentives (id.). Benefits for each program were categorized in terms of capacity, energy, and non-electric savings (id.).

**B. Competitive Procurement**

Pursuant to G.L. c. 25, § 19, the Department is required to ensure that the delivery of an electric company's energy efficiency programs uses competitive procurement to the fullest extent practicable. NSTAR Electric provided a table illustrating the percentages of outsourced and competitively procured energy efficiency services for 2004 (2004 Plan at II-7). According to NSTAR Electric: (1) 81 percent of its residential energy efficiency services will be outsourced and 86 percent of those residential outsourced services will be competitively procured; (2) 76 percent of its low-income energy efficiency services will be outsourced and eleven percent of those low-income outsourced services will be competitively procured;<sup>4</sup> (3) 53 percent of its commercial and industrial energy efficiency services will be outsourced and 85 percent of those commercial and industrial outsourced services will be competitively procured (id.).

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<sup>4</sup> Residential low-income activities must be "implemented through the low-income weatherization and fuel assistance network" and therefore, are not required to be competitively procured. G.L. c. 25, § 19; Massachusetts Electric Company and Nantucket Electric Company, D.T.E. 03-2, at 4-5 (2003).

### C. Analysis and Findings

#### \_\_\_\_\_1. Cost-effectiveness

NSTAR Electric provided evidence demonstrating that each of its proposed 2004 energy efficiency programs achieved a pre-implementation B/C ratio of 1.77 or greater (2004 Plan, App. A at A-1). The Department notes that in no case was a pre-implementation B/C ratio below 1.00 (id.). The Department reviewed the Company's B/C calculations and the detailed information provided in support of these calculations and finds that the benefits and costs were determined consistent with Department criteria for establishing program cost-effectiveness. DTE Guidelines at §§ 3-4. Accordingly, the Department finds that the Company's 2004 energy efficiency programs, as estimated in the pre-implementation phase, are cost-effective.

#### 2. Competitive Procurement

NSTAR Electric provided evidence that it competitively procures and out-sources a high percentage of its energy efficiency program activities (2004 Plan at II-7). Therefore, in accordance with G.L. c. 25, § 19, the Department finds that NSTAR Electric's 2004 Plan provides for competitive procurement to the fullest extent practicable.

### III. FINANCING PROPOSAL

#### A. Company Proposal

NSTAR Electric requests Department permission, pursuant to G.L. c. 164, § 17A, to provide financial assistance to certain municipal and small business customers (2004 Plan

at IV-45).<sup>5</sup> NSTAR Electric stated that it would provide zero-interest loans to (1) municipal customers participating in the Company's 2004 Construction Solutions, Business Solutions, and Small Business Solutions energy efficiency programs; and (2) small commercial customers participating in the Company's 2004 Small Business Solutions program (2004 Plan at IV-52 to IV-61; Tr. at 7-8).<sup>6</sup> NSTAR Electric stated that these loans would be used by municipal and small commercial customers for the purchases of energy efficiency equipment when participating in the aforementioned programs (Tr. at 7-8, 11-12). According to NSTAR Electric, participating customers would have their choice of either a twelve-month or 24-month pay back period (2004 Plan at IV-55, 61).

NSTAR Electric stated that its financial assistance proposal is intended to overcome two problems that its municipal customers face: (1) a lack of discretionary funds; and (2) a lack of technical expertise (id. at IV-47, 54). The Company pointed out that municipal customers may be unable to absorb even small increases in start-up costs and that municipal energy efficiency projects may also be foregone due to a lack of technical expertise (id. at IV-54,55). To address this lack of technical expertise, NSTAR Electric proposes to cover

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<sup>5</sup> NSTAR Electric stated that, for purposes of its 2004 Plan, "municipal" includes all state, city, and town accounts that may participate in the Company's Construction Solutions, Business Solutions, and Small Business Solutions programs (2004 Plan at IV-45). NSTAR Electric explained that \$1.5 million, \$1.1 million, and \$0.727 million has been budgeted for municipal customer incentives in its Construction Solutions, Business Solutions, and Small Business Solutions programs, respectively (2004 Plan at II-6).

<sup>6</sup> NSTAR Electric stated that its Small Business Solutions program targets commercial and industrial customers with an average monthly demand of less than 100 kilowatts (2004 Plan at IV-60).



the entire cost of technical assistance for municipal customers (id. at IV-55, 56). NSTAR Electric stated that so-called turnkey projects<sup>7</sup> will be provided to small business customers participating in NSTAR Electric's Small Business Solutions program, obviating the need for technical knowledge on the part of that customer group (id. at IV-59). NSTAR Electric anticipates that the total loans to be made through its proposed financing arrangement would aggregate \$350,000 among the three electric distribution companies operating under NSTAR Electric (Tr. at 16). This represents a small percentage of the Company's total equity capitalization of over \$1.5 billion.<sup>8</sup>

NSTAR Electric requests that the Department approve its financial proposal because it is consistent with G.L. c. 164, § 17A and Department precedent (February 17, 2004 NSTAR Electric letter to the Department, citing Massachusetts Electric Company, D.T.E. 03-2, at 7-11 (2003)).

B. Analysis and Findings

NSTAR Electric requests approval of a financial proposal intended to increase the level of energy efficiency in the municipal and small commercial customer sectors. DOER supports NSTAR Electric's zero-interest loan proposal (DOER Report at 4). NSTAR Electric points out that its 2004 Plan, including the financial proposal, is jointly sponsored by The Energy

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<sup>7</sup> A turnkey project is one in which the customer need do nothing more than assent for the project to commence.

<sup>8</sup> 2003 Annual Returns to the Department for Boston Edison Company, Cambridge Electric Light Company, and Commonwealth Electric Company at 112. The Company's Annual Returns were incorporated by reference into evidence at the evidentiary hearing (Tr. at 11).

Consortium (“TEC”); Associated Industries of Massachusetts, Inc. (“AIM”); Massachusetts Climate Action Network (“MCAN”); and the Low-Income Energy Affordability Network (“LEAN”) (February 17, 2004 NSTAR Electric letter to the Department).

NSTAR reported that, based on research, it considers defaults unlikely (Tr. at 15). NSTAR Electric has limited potential exposure as a percentage of total equity capitalization of over \$1.5 billion associated with its electric distribution operations (NSTAR Electric’s 2003 Annual Return at 112). Moreover, NSTAR Electric anticipates that the total loans to be made through its proposed financing arrangement would aggregate \$350,000 among the three electric distribution companies operating under NSTAR Electric (Tr. at 16). The Department is satisfied that the risks and uncertainties associated with NSTAR Electric’s financing program are de minimis.

The Company’s energy efficiency programs are funded entirely from the system benefits charge. G.L. c. 25, § 19. Further, all energy efficiency programs must be cost-effective. Id. The Department notes the strong B/C ratios exhibited by programs in the Company’s commercial and industrial (“C&I”) sector (2004 Plan, App. A at A-1). Specifically, the Company’s Construction Solution program is included in the C&I Lost Opportunity category with a category B/C ratio of 3.72; the Company’s Business Solutions program is part of the Large C&I Retrofit category with a category B/C ratio of 4.41; and the Company’s Small Business Solutions program is part of the Small C&I Retrofit category with a category B/C ratio of 2.92 (id.). In light of these B/C ratios, the Department acknowledges the strong likelihood of cost-effective implementation and the nominal level of risk associated

with the Company's Construction Solutions, Business Solutions, and Small Business Solutions programs. The Department has recognized the importance of program cost-effectiveness when considering a financial proposal similar to that of NSTAR Electric. D.T.E. 03-2, at 11.

Moreover, the actual performance of these programs is subject to Department review in a follow-up proceeding. See D.T.E. Guidelines at § 4.2.2.

The Department finds that NSTAR Electric's financing proposal is consistent with the public interest because the public is at least as well served by approval of the proposal as by its denial. D.P.U. 91-165, at 7. Accordingly, the Department approves the proposal.

#### IV. SHAREHOLDER INCENTIVES

##### A. Company Proposal

NSTAR Electric proposed an alternative to the method set forth in the DTE Guidelines for calculating the after-tax shareholder incentives that may result from implementation of its 2004 Plan (2004 Plan at VI-1 to VI-4, App. B). See DTE Guidelines at § 5.00. NSTAR Electric proposed to (1) fix the after-tax shareholder incentive at five percent; (2) set the threshold level of performance at 75 percent; (3) set the exemplary level of performance at 110 percent; and (4) slightly reallocate the weights assigned to the savings and value determinants (2004 Plan at VI-1 to VI-4; 2004 Plan at App. B).<sup>9</sup>

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<sup>9</sup> In NSTAR Electric's 2003 Energy Efficiency Plan, the Department approved use of (1) a fixed shareholder incentive rate of five percent, instead of the Treasury Bill rate in calculating its shareholder incentive, and (2) a threshold performance level of 70 percent and exemplary level of 110 percent of design level for use in its calculations of shareholder incentives. NSTAR Electric Company, D.T.E. 03-48, at 10-14 (2003).

The Company stated that its 2004 shareholder incentive proposal is the product of negotiations with and is supported by TEC, AIM, MCAN, and LEAN (February 17, 2004 NSTAR Electric Letter to the Department). With respect to the proposed five percent after-tax incentive rate, NSTAR Electric stated that this modification is necessary because the “low prevailing Treasury bill rates may not provide an appropriate incentive to the electric distribution companies” (2004 Plan at VI-1). Under its proposal, the Company’s shareholder performance incentive would amount to approximately \$3.025 million based on energy efficiency expenditures of about \$60.5 million in 2004 (id. at 3; App. B, Table B-1).<sup>10</sup>

Under its threshold and exemplary proposal, NSTAR Electric’s shareholder incentive payment amount would range from 75 percent to 110 percent of its 2004 energy efficiency expenses (id. at VI-2). NSTAR Electric noted that a shareholder incentive would not be earned if an energy efficiency program failed to achieve the threshold level of 75 percent of design level performance (id.). NSTAR Electric stated that even if an energy efficiency program accomplished more than 110 percent of design level performance, the shareholder incentive for such a program would nonetheless be capped at the 110 percent level (id.). Finally, NSTAR Electric proposes to continue the use of a savings determinant, a value determinant, and performance metric determinant (id. at VI-3). Consistent with the previous practice of using these determinants, each determinant is assigned a percentage weight (id.). NSTAR Electric Company, D.T.E. 03-48, at 13-14 (2003). NSTAR Electric proposes a slight

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<sup>10</sup> The \$60.5 million includes unspent funds carried over from NSTAR Electric’s 2003 energy efficiency plan budget (2004 Plan at 3).

reallocation of the weight assigned to the savings and value determinants for 2004 (2004 Plan at VI-3). Savings and value determinants associated with NSTAR Electric's 2004 residential programs would be weighted at 40 percent and 30 percent, respectively, instead of the 50 percent and 20 percent approved in 2003 (*id.*). See D.T.E. 03-48 (2003). Savings and value determinants associated with NSTAR Electric's 2004 commercial and industrial programs would be adjusted the same as proposed for the residential programs, i.e., weights of 40 percent and 30 percent, respectively, instead of 50 percent and 20 percent in 2003 (2004 Plan at VI-3).

B. DOER Report

DOER recommends adoption of the Company's 2004 shareholder incentive proposal (DOER Report at 4-6). DOER offers two reasons in support of the proposal: (1) due to the precipitous decline in the three-month Treasury bill rate, the performance incentive method prescribed in the DTE Guidelines is no longer adequate to motivate energy efficiency administrators to pursue the highest quality programs for ratepayers envisioned by the Legislature; and (2) the Department approved a similar proposal for NSTAR Electric's 2003 Energy Efficiency Plan (DOER Report at 4-6, citing D.T.E. 03-48).

C. Analysis and Findings

When an entity seeking Department approval of its Plan requests a different method from that specified in the DTE Guidelines, the burden falls on that entity to demonstrate the compelling nature of such a request. DTE Guidelines at § 1(2). In this proceeding, NSTAR Electric has proposed: (1) a fixed shareholder incentive rate of five percent, instead of the

Treasury Bill rate in calculating its shareholder incentives; (2) an exemplary performance level of 110 percent of design level for use in its calculation of shareholder incentives; and (3) a slight adjustment to the weights assigned to the savings and value determinants.

The Department previously granted an exception to the DTE Guidelines that allowed distribution companies to use a fixed rate of five percent instead of the Treasury Bill rate in calculating its shareholder incentives. D.T.E. 03-48, at 12 (2003); Fitchburg Gas and Electric Light Company, D.T.E. 03-44, at 12 (2003); Western Massachusetts Electric Company, D.T.E. 03-43, at 12 (2003).

In determining incentive levels, the Department must reach a balance between two objectives: (1) promoting effective programs, and (2) protecting the interest of ratepayers. D.T.E. 98-100, at 21-22 (2000). While NSTAR Electric's proposed five percent after-tax rate exceeds the rate now provided in the DTE Guidelines, it is near the middle of the range that DOER proposed in D.T.E. 98-100, and this rate was approved for NSTAR Electric's 2003 Energy Efficiency Plan. D.T.E. 03-48, at 12.<sup>11</sup> The Department reaffirms that an incentive must be large enough to promote good program management, but small enough to leave almost all of the energy efficiency funds to directly server customers. The Company's proposal balances these two objectives, and is consistent with DOER information that the Department used in formulating the DTE Guidelines. The Department finds that the Company has met its

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<sup>11</sup> DOER has maintained that an incentive of four to six percent, equal to a three to four percent riskless real rate of return plus an inflation rate of one to two percent, would be sufficient to motivate electric companies to manage energy efficiency programs well. D.T.E. 98-100, at 36.

burden to demonstrate the need for its request for an alternate method to calculate shareholder incentives in 2004. DTE Guidelines at § 1(2). Accordingly, the Department grants NSTAR Electric's request for an exception to the DTE Guidelines, and grants NSTAR Electric's request to use five percent instead of the Treasury Bill rate in calculating after-tax shareholder incentives for the 2004 Plan.

NSTAR Electric's proposal to establish an exemplary performance level of 110 percent of design level is the product of collaborative negotiations and received the full support of DOER, The Energy Consortium, Associated Industries of Massachusetts, the Massachusetts Climate Action Network, and the Low-Income Energy Affordability Network (DOER Report at 2, 4). NSTAR Electric raised the threshold performance level from the 70 percent approved in D.T.E. 03-48, to 75 percent, which is now in conformance with the D.T.E. Guidelines at § 5.2. Also in D.T.E. 03-48, at 13, the Department approved the use of an exemplary performance level of 110 percent of design level for use in calculation of shareholder incentives for 2003. In consideration of Department precedent, DOER's conclusions, and the support of the energy efficiency stakeholders, the Department finds that the Company has demonstrated the reasonableness of its proposal to set the exemplary performance level at 110 percent of performance goals. Accordingly, the Department accepts the Company's proposal to establish a threshold performance level of 75 percent and exemplary performance level of 110 percent of design level.

Distribution companies may express the level of performance they expect to achieve in implementation of their energy efficiency programs in levels of savings, in energy commodity

and capacity, and in other measures of performance as appropriate. DTE Guidelines at § 5.2. Here, the Company has established “other measures of performance.” NSTAR Electric proposes to continue the use of a savings determinant, a value determinant, and performance metric determinant, as approved in D.T.E. 03-48 (2004 Plan at VI-3). However, NSTAR Electric proposes a slight reallocation of the weight assigned to the savings and value determinants for 2004 (*id.*). The Department recognizes that customers benefit when company programs perform at higher levels and at lower cost. We find that the Company’s reallocation of weight assigned to the savings and value determinants is in accordance with that objective. Accordingly, the Department finds that the Company’s proposed reallocation of the savings and value determinant weights for 2004 is appropriate. DTE Guidelines at § 5.2.

V. ORDER

Accordingly, after due notice, opportunity for public comment, and consideration, it is hereby

ORDERED: That the Petition of NSTAR Electric Company for approval of its Energy Efficiency Plan for 2004 is APPROVED; and it is

FURTHER ORDERED: That the petition of NSTAR Electric Company, pursuant to G.L. c. 164, § 17A, for approval of a financial arrangement with municipal and small commercial customers is APPROVED; and it is



FURTHER ORDERED: That NSTAR Electric Company follow all other directives contained in this Order.

By Order of the Department,

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Paul G. Afonso, Chairman

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W. Robert Keating, Commissioner

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Eugene J. Sullivan, Jr., Commissioner

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Deirdre K. Manning, Commissioner

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. (Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).